

USER'S GUIDE

HYPERNEWT

VERSION 2.6

FOUNDATION SYSTEMS

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1. Getting Started

About HyperNewt

HyperNewt is a revolutionary new way to create and organize data on your Newton. Its intuitive interface, flexible data management controls, and powerful linking capabilities make HyperNewt your Newton's new window to information.

If you are new to the Newton, you will find HyperNewt easy to learn and use. HyperNewt leverages on the built-in filing system of the Newton by adding a familiar file and folder metaphor. HyperLinks are similar to aliases or shortcuts on your desktop computer.

If you are an experienced Newton user, HyperNewt will change your relationship with data on your Newton. HyperNewt leverages on the Newton's data architecture, allowing access to virtually all types of data through HyperLinks, and the ability to organize data hierarchically. HyperNewt gives you the power and flexibility to arrange your information around meaningful relations that you define.

Overview of features

- Organize your notes hierarchically using a familiar filing system metaphor. HyperNewt supports dragging and dropping of files, directory aliases, and more!
- Link data from all the built-in apps—Names, Calls, Extras Drawer, Dates, NewtWorks, Notes, and the In/Out Box—and 3rd-party software into HyperNewt.
- Keep track of every detail of an important business project in a single location: contacts, spreadsheets, word processing documents, meetings, applications, calls, notes, travel itineraries, and expenses!
- Have a central launching pad for all your applications and files. HyperNewt is an excellent backdrop application!

System requirements

To use HyperNewt on your Newton device, you need the following:

- a Newton device running the Newton 2.0 operating system or later.
- 99 kilobytes of storage space for the HyperNewt application, plus additional storage space for new information.
- 21 kilobytes of storage space for the HyperLink Manager application.

Installation

If HyperNewt is not already installed on your Newton device, you need to install it into your Newton's memory or onto a PC card. To do this, you use a Newton utility that can install software packages, such as the Newton Connection Utilities or Newton Backup Utility, with a computer running the Mac OS or Windows operating system.

Once installed, the HyperNewt and HyperLink Manager are automatically stored in the Unfiled folder in the Extras Drawer.

Opening HyperNewt

- 1 Tap Extras.

Note: If you don't see the Extras Drawer icon, it means Extras is the backdrop, the default background application. Go to the Extras Drawer by tapping every  you see. For information about the backdrop application, refer to the documentation that came with your Newton device.

- 2 If you don't see the HyperNewt icon, tap the folder tab and tap Unfiled Icons.



- 3 Tap the HyperNewt icon.

Note: If the HyperNewt icon doesn't appear, tap Extras, tap the folder tab, and in the list that appears, tap All Icons. Then tap the HyperNewt icon

- 4 When you are finished using HyperNewt, tap  to quit.

2. Overview

The chapter outlines some of the important components of HyperNewt: the hierarchical filing system and HyperLinks. It is important to understand the distinction between the filing systems that comes built-in to the Newton and the hierarchical filing system that HyperNewt creates. HyperNewt allows you to use both the built-in filing system and its hierarchical filing system to efficiently organize and visualize data on your Newton device.

Built-in filing system

The Newton comes with a built-in system of organizing data in folders that you create and name. Within an application, you file items into folders using the Folder button . When you create a new item, it is automatically placed in the current folder you are viewing. The Newton has two types of folders—global and local. You can create up to 12 global and 12 local folders. With the built-in filing system, you cannot create a hierarchical filing system.

HyperNewt hierarchical filing system

HyperNewt leverages on the built-in filing system by adding a separate hierarchical filing structure in which you can place your data. HyperNewt creates directories in which you can place other directories or items you create within HyperNewt or the Notepad. In HyperNewt, you move directories and items into directories using the Directory button . HyperNewt allows you to create as many directories and subdirectories as your storage space permits.

HyperLinks

HyperLinks leverage on the flexible storage architecture of the Newton to allow users to link various types of data into HyperNewt's hierarchical filing system. Data from applications such as Names, Dates, Calls, Extras Drawer, and NewtWorks can be linked into HyperNewt. HyperNewt's hierarchical filing system and HyperLinks provide powerful means for displaying complex sets of information in an organized and visually arresting manner.

3. Setting up HyperNewt

When you install HyperNewt for the first time, HyperNewt will have to setup your Newton to operate properly. The HyperNewt will install the following items when you first load HyperNewt:

- HyperNewt preferences
- Notepad soup indices—Three indices will be added to the Notepad soup to help maintain HyperNewt’s hierarchical filing system. Please refer to Appendix D for more information on the indices that HyperNewt adds to the Notepad soup.
- Import notes—HyperNewt-specific directory information will be added to each note in your Notepad soup.

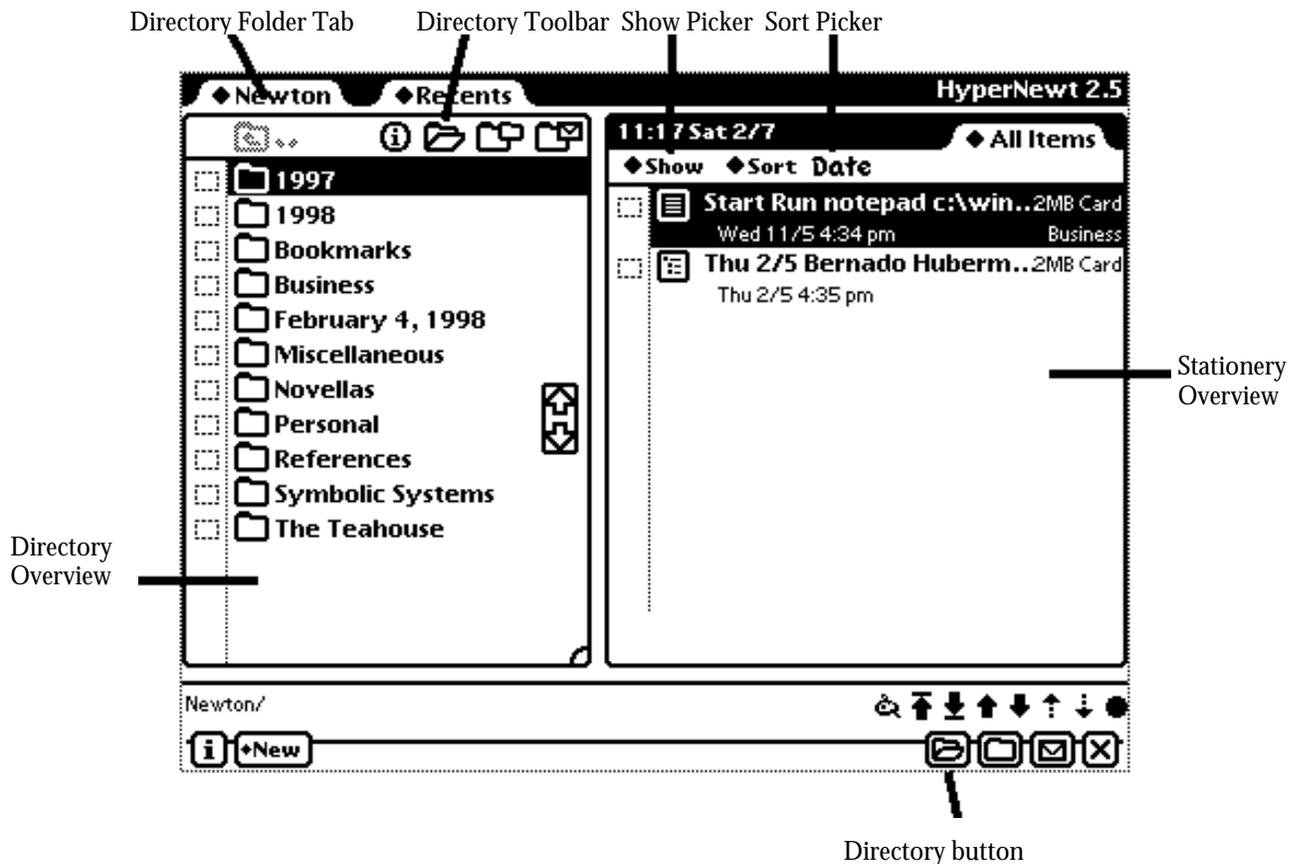
When you install the HyperLink Manager application for the first time, it will install the following items onto your Newton.

- Default HyperLink Managers—The following HyperLink Managers will be added to your Newton:
 - Calls
 - Cigar Box (Catamount Software)
 - Dates
 - Extras Drawer
 - Gulliver (True North)
 - Home Inventory (Catamount Software)
 - In/Out Box
 - MORGAN (Catamount Software)
 - Names
 - Newton Books
 - NewtWorks
 - Notepad
 - Out of Pocket (True North)
 - QuickFigure Pro (PelicanWare)
 - To Do List

4. The HyperNewt Overview

You can always see a list, or overview, of all your items and directories in HyperNewt. This is useful if you want to do something to several items, such as print or fax, or to several directories, such as duplicate or move. Follow these steps to display the HyperNewt Overview.

- 1 Open HyperNewt.
- 2 Tap the Overview button  until the HyperNewt Overview appears.

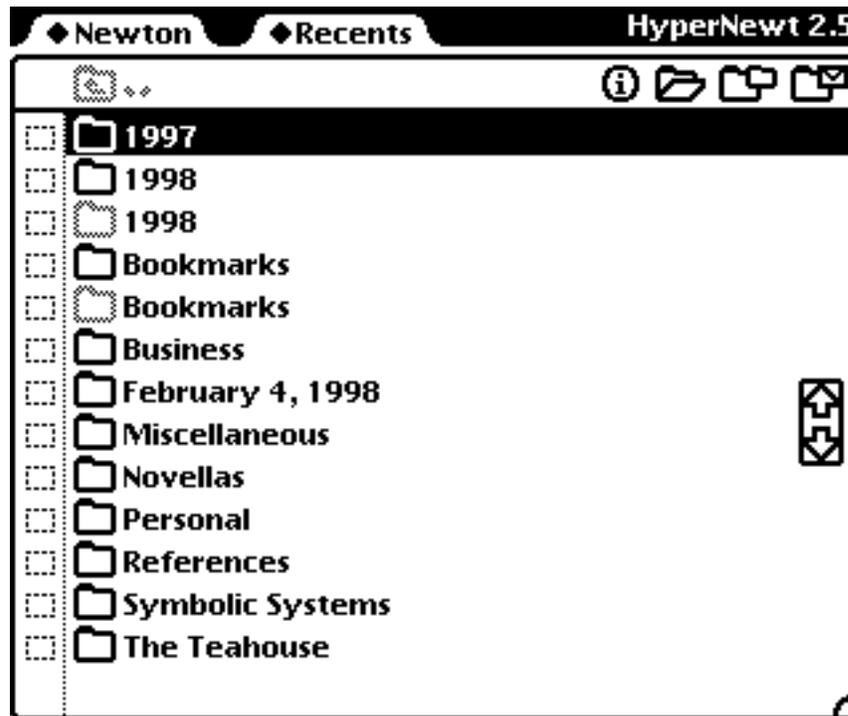


- Directory Overview—Lists all directories in the current HyperNewt directory.
- Directory Folder Tab—Lists all parent directories and subdirectories of the current HyperNewt directory.
- Directory Toolbar—Perform a variety of actions on HyperNewt directories.
- Stationery Overview—Lists all items in the current HyperNewt directory.
- Show Picker—Customize the display of the overview.
- Sort Picker—Change the sort order of items in the overview.
- Directory button—Moves selected items to another HyperNewt directory.

5. The Directory Overview

The Directory Overview lists all directories in the current HyperNewt directory.

- 1 Tap the Overview button  until the HyperNewt Overview appears.



Navigating directories

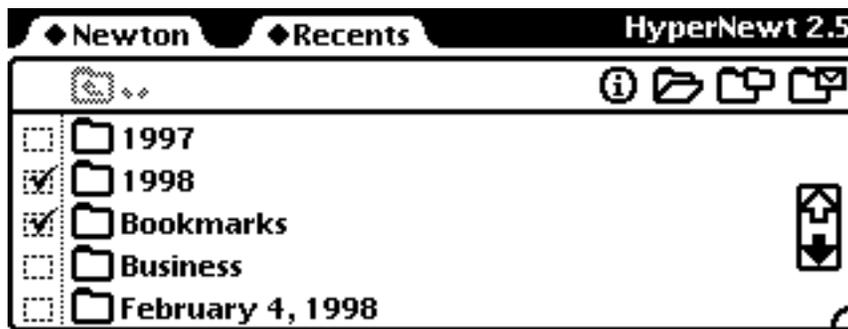
- 1 To go to a particular directory, tap it.
- 2 To move up a directory, tap the Up Directory button  ..
- 3 To move up more than one directory, tap the Directory Folder Tab and in the list that appears, tap the directory you wish to open.

To see more of the directory list (if it's longer than one screen), tap the up and down arrow buttons in the Directory Overview.

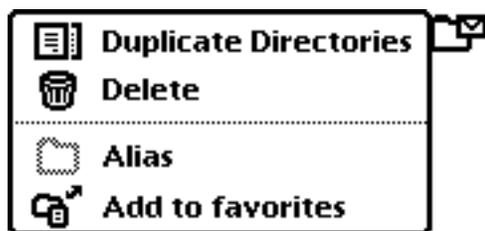
Duplicating and deleting directories

To duplicate or delete one or more directories:

- 1 Tap the Overview button  until the HyperNewt Overview appears.
- 2 Tap the checkbox next to each directory you want to duplicate or delete. A checkmark appears in the checkbox of the selected items.



- 3 Tap the Directory Routing button  and in the list that appears, tap Duplicate Directories or Delete.



A message appears, asking you if you really want to delete the selected directories.

Note: When you delete directories in HyperNewt, all directories and items contained within the selected directories will be deleted.

- 4 Tap OK.

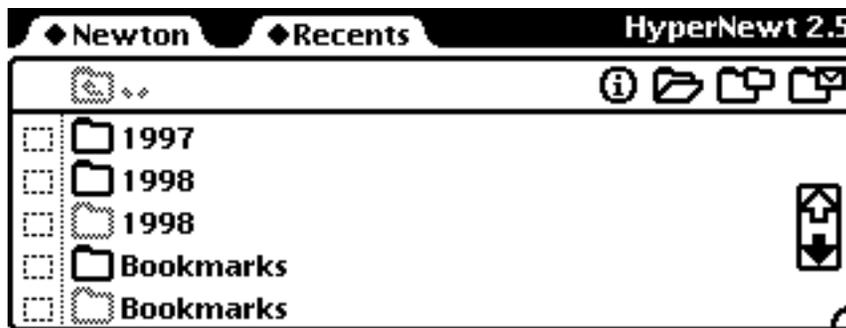
Creating directory aliases

You can create aliases or shortcuts to directories and place them anywhere in the HyperNewt filing system. Directory aliases act just like normal directories except they will not allow the contents of the aliased directories to be deleted or duplicated when performing routing actions.

To create directory aliases, follow these steps:

- 1 Tap the Overview button  until the HyperNewt Overview appears.
- 2 Tap the checkbox next to each directory you want to create an alias for. A checkmark appears in the checkbox of the selected directories.
- 3 Tap the Directory Routing button  and in the list that appears, tap Alias.

Directory aliases  will be created for the selected directories.



Resizing the Directory Overview

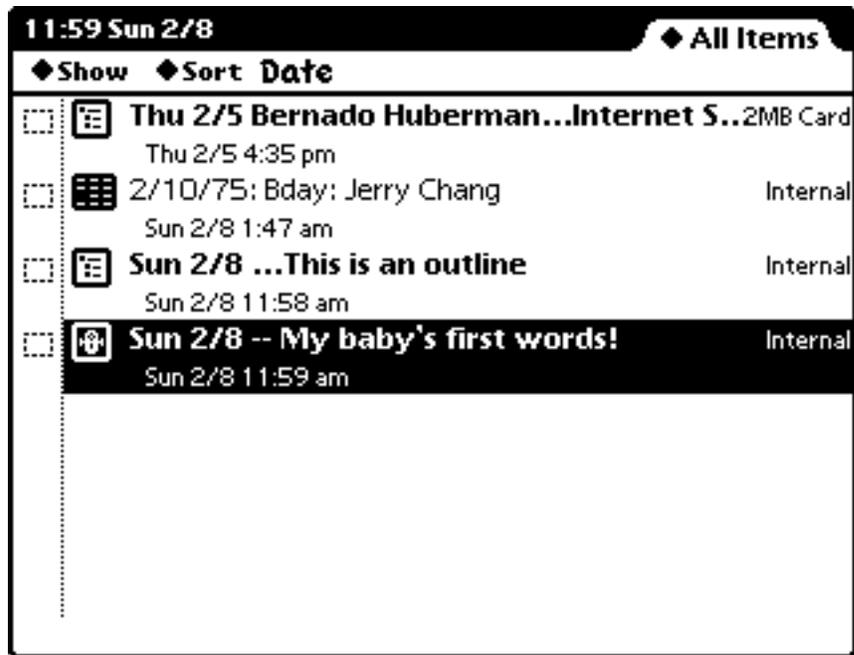
You can adjust the size of the Directory and Stationery Views to display more directories or more items on your Newton's screen.

- 1 Tap and hold the directory resize button .
- 2 Drag the directory resize button to the desired position and let go. The Directory and Stationery Overview will automatically adjust to the new size.

6. The Stationery Overview

The Stationery Overview lists all items in the current HyperNewt directory. The Stationery Overview operates in a similar fashion to the built-in Notepad's overview. Please refer to your Newton's User's Manual for additional information on using the Notepad's overview.

- 1 Tap the Overview button  until the HyperNewt Overview appears.



- 2 Do one of the following:
 - To go to a particular item, tap it.
 - To see more of the list (if it's longer than one screen), tap the up and down arrow buttons.

Customizing the overview

You can customize the overview to display only the information that you want to see. For instance, you can set the overview to display one line titles, item labels, item timestamps, or the storage device of an item. The following is a list of the options that you can set for the Stationery Overview.

- One/Two-line display—Displays items in the overview on one or two lines.
- Date—Displays the date at which the item was created.
- Label—Displays the folder of the item.
- Store name—Displays the store which contains the item.
- Short title—Displays a short title of the item.

- 1 Tap the Overview button  until the HyperNewt Overview appears.
- 2 Tap the Show picker and in the list that appears, tap on the options that you want to set.



Changing the sort order

You can sort items in the Stationery Overview based on a variety of criteria:

- Date
- Title
- Stationery

To sort tasks, follow these steps:

- 1 Tap the Overview button  until the HyperNewt Overview appears.
- 2 Tap Sort and in the list that appears, tap on the desired sort order.



7. Creating New Information

You can create any stationery registered to the Notepad as well as directories in HyperNewt.

- 1 Open HyperNewt.
- 2 Tap New.

A list appears showing the different types of items, or stationery, you can use:



- 3 Tap the type of item you want to use. The new item will be placed in the current directory. A blank item appears with a caret, or insertion point. To learn how to enter information into the various types of stationery, refer to your Newton's User's Manual.

Creating new directories

If you choose Directory from the list above, the New Directory slip appears:



- 1 Enter the title of the new directory
- 2 Tap Sort by to change the sort order for the new directory.
- 3 Navigate to the directory you wish to place the new directory.
- 4 Tap New to create a new directory.
- 5 Create additional directories.
- 6 Tap the close box when you are finished.

8. HyperLinks

About HyperLinks

A HyperLink is a notepad stationery that contains a link to some information stored on the Newton. A HyperLink may point to a name, call, word processing document, spreadsheet, travel itinerary, webpage, meeting, to-do task, or a page in a Newton Book. Virtually any data that can be routed on your Newton can be HyperLinked!

HyperNewt, coupled with HyperLinks, allows you to place within a directory, all kinds of information on your Newton. For instance, suppose you are working on an important business project. With HyperNewt and HyperLinks, you can place contacts, meeting notes, presentation outlines, spreadsheets, travel plans, and fax items in one central location.

HyperLink support is available for the following built-in and third-party applications:

- Calls
- CardMedia (Sine of the Times)
- Cigar Box (Catamount Software)
- Dates
- Extras Drawer
- Gulliver (True North)
- Home Inventory (Catamount Software)
- In/Out Box
- MoreInfo (SilverWARE)
- MORGAN (Catamount Software)
- Names
- NewtDevEnv (Steve Weyer)
- Newton Books
- NewtScape (Steve Weyer)
- NewtWorks
- Notepad
- Out of Pocket (True North)
- QuickFigure Pro (PelicanWare)
- Stationery Construction Kit (StandAlone, Inc.)
- To Do List

HyperLink support is also available for the following third-party application:

- NetHopper (AllPen)
- NSBasic (NSBasic)
- LunaSuite (LunaTech Research)

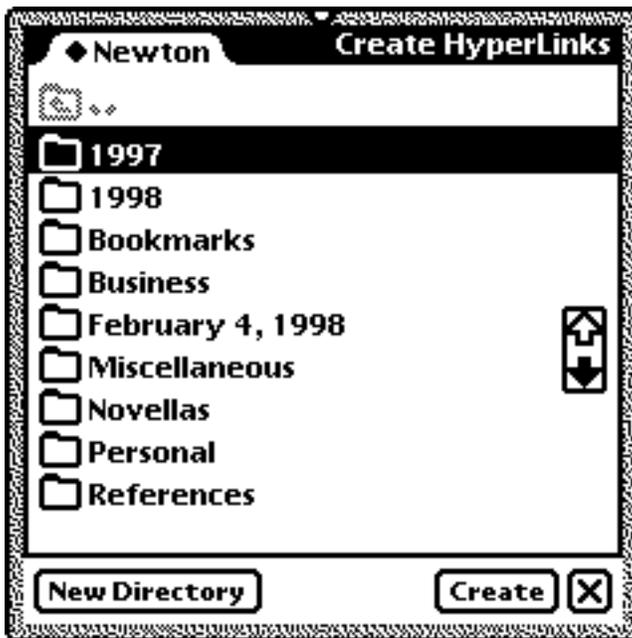
Creating HyperLinks

To create a HyperLink, follow these steps:

- 1 Open the application that contains the data you wish to link.
- 2 Go to the item or select the item or items from the overview
- 3 Tap the Routing button and in the list that appears, tap HyperLink

Note: If you do not see the HyperLink routing item, then the data cannot be HyperLinked.

The Create HyperLinks slip will appear.



- 3 Navigate to the directory you wish to create the HyperLink in.
- 4 Tap Create.

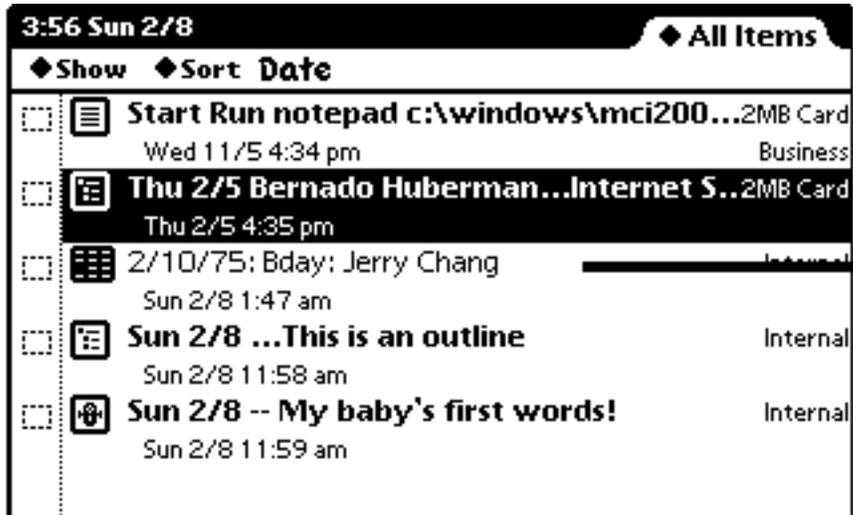
A HyperLink stationery item will appear in the selected directory.

If the data cannot be HyperLinked, an alert will appear informing you of the problem.

Contact the publisher of the application that you are trying to create HyperLinks and ask them to include HyperNewt support.

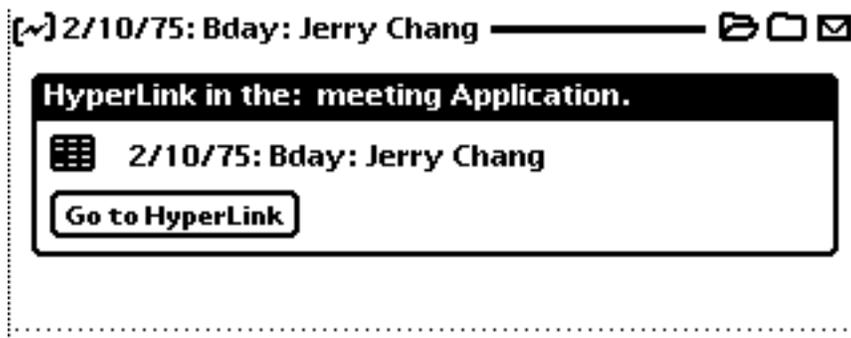
Viewing HyperLinks

- 1 Open HyperNewt
- 2 Navigate to the directory containing the desired HyperLink.
- 3 Tap the HyperLink to display the linked data.



HyperLink to an annual event in Dates.

If you are in the default view, you will see the HyperLink stationery item:



- 4 Tap Go to HyperLink to display the linked data.

If the linked data has been deleted, moved to another store, or cannot be located, a slip will appear informing you of the problem.

9. Organizing Information

You can use both the Newton's built-in filing system and HyperNewt's hierarchical filing system to efficiently organize your information by filing things in folders and moving things into HyperNewt directories that you create and name.

Moving items into HyperNewt directories

You can move directories and items into other directories to create your own custom, organized hierarchical filing structure.

- 1 Tap the Overview button  until the HyperNewt Overview appears.
- 2 Do one of the following:

Option A: Moving multiple items with the Directory button

- 1 Tap the checkbox next to each directory or item you want to move.
A checkmark appears in the checkbox of the selected directories or items.
- 2 Tap the Directory button  in the Directory Overview to move the selected directories or the Directory button  on the status bar to move the selected items.
The Move Items slip will appear.



- 3 Navigate to the directory you wish to move the selected directories or items into.
- 4 Tap Move.

Option B: Using drag and drop

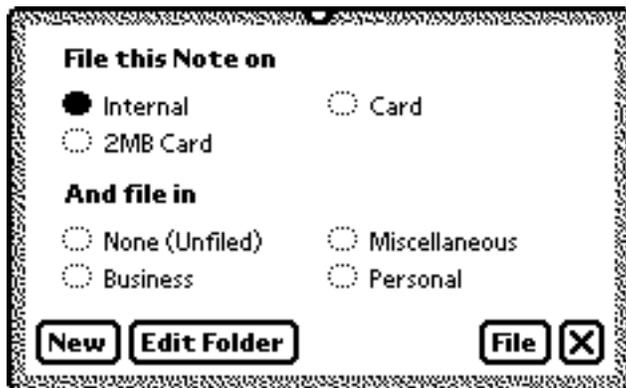
- 1 If you are moving a directory, tap and hold the directory icon  of the directory you wish to move. If you are moving an item, tap and hold the icon of the item you wish to move.
- 2 Drag the directory or item to the destination directory.
The destination directory will be highlighted.
- 3 Lift the Newton pen to move the directory or item into the destination directory.

Option C: Moving a single item with the Directory button

- 1 Go to the item you want to move
- 2 Tap the Directory button .
- The Move Items slip will appear.
- 3 Navigate to the directory you wish to move the selected item.
- 4 Tap Move.

Putting items into folders

- 1 Go to the item you want to file.
- 2 Tap the Folder button .
- The folder slip appears.



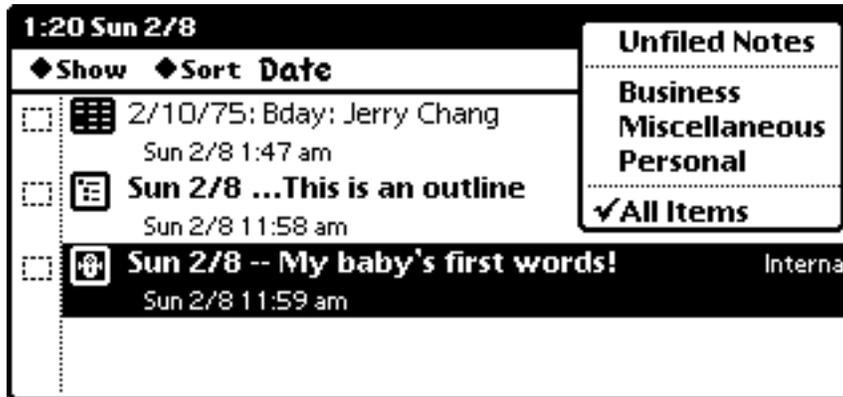
- 3 Tap the name of the folder you want the item to be stored in, then tap File.

If you are filing an item to a different folder, the item seems to disappear, because it moves immediately to the other folder.

Filing multiple items into folders

You can put a number of items created in HyperNewt into a folder all at once.

- 1 Tap the Overview button  until the HyperNewt Overview appears.
- 2 If necessary, tap the folder tab, then tap the name of the folder where the items are currently filed.



- 3 Tap the checkbox next to each item you want to file.
A checkmark appears in the box next to each selected item.
- 4 Tap the Folder button  and in the slip that appears, tap the name of the folder that you want to file the items in.
- 5 Tap File.
Items disappear from the overview or list because they are now in another folder.

For information on creating, renaming, and deleting folders, please refer to your Newton's User's Manual.

Filing directories

You can file directories to other storage devices. You can choose to file the directory itself or all subdirectories and items contained within a directory.

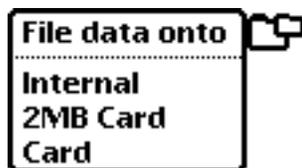
1 Tap the Overview button  until the HyperNewt Overview appears.

2 Tap the checkbox next to each directory you want to file.

A checkmark appears in the checkbox of the selected directories.

3 Tap the Directory Filing button .

A list will appear displaying the current storage devices in which you can file the selected directories.



4 Tap the store you want to file the directory

A message appears, asking you if you want to file the directory itself or the directory and all its contents to the new storage device.

5 Tap your choice.

Changing directory information

You can rename directories or change their sort order.

- 1 Tap the Overview button  until the HyperNewt Overview appears.
- 2 Tap the checkbox next to a directory you want to rename.
A checkmark appears in the checkbox of the selected directory.
- 3 Tap the Directory Routing button  and in the list that appears, tap Rename.
Note: You must select only one directory for the Rename routing item to appear.

The Directory Information slip will appear for the selected directory.



- 4 Enter your information. Tap the close box when you are finished.

To change directory information for the current directory, follow these steps:

- 1 Tap the Overview button  until the HyperNewt Overview appears.
- 2 Tap the Directory Information button .

The Directory Information slip will appear for the current directory.

- 3 Enter your information. Tap the close box when you are finished.

10. Recents and Favorites

HyperNewt can keep track of recently viewed directories, notes, and HyperLinks, as well as a list of your favorite items.

Activating Recents

- 1 Open HyperNewt.
- 2 Tap the Information button .
- 3 In the list that appears, tap Prefs. The HyperNewt Preferences slip appears.
- 4 Tap Recents
- 5 Make sure the checkbox Keep track of recently visited items is checked.
- 6 Close the Recents preferences slip and the HyperNewt Preferences slip.

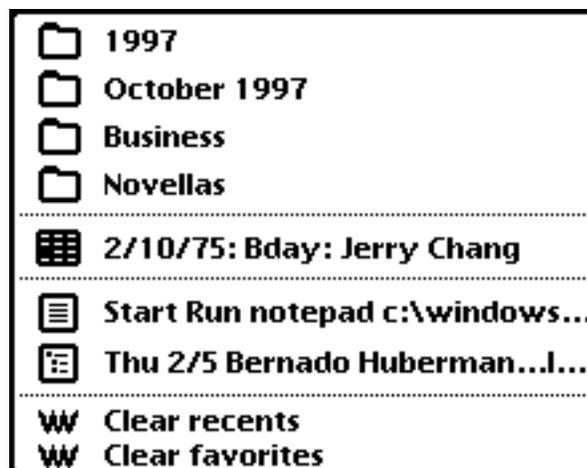
A tab will now appear at the top of the screen called Recents.



Using Recents

Whenever you open a directory, edit a note, or view a HyperLink, an item will appear in Recents.

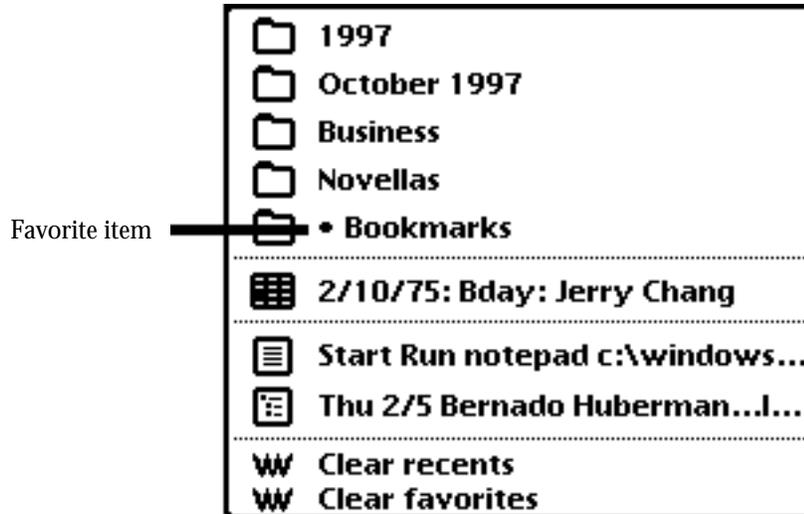
- 1 Tap the Recents tab
- 2 In the list that appears, tap the item that you want to view.



Using Favorites

You can also have HyperNewt remember frequently viewed directories, HyperLinks, and items. Data that you add to Favorites will be listed in the Recents menu with a bullet, '•' next to the item title. Follow these steps to add directories, HyperLinks, and items to Favorites:

- 1 Select the items you want to add to Favorites.
- 2 Tap the Routing button and in the list that appears, tap Add to favorites.
- 3 The items will now appear in the Recents menu.



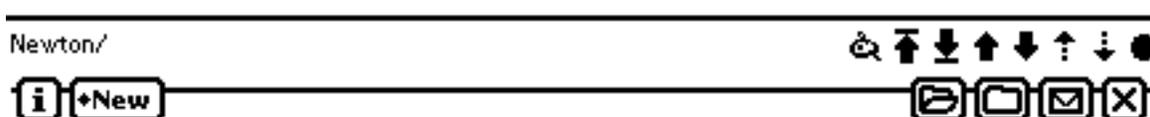
Clearing Recent and Favorite items

- 1 Tap the Recent tab
- 2 In the list that appears, tap Clear recents to remove all recents from the list.
- 3 Tap Clear favorites to remove all favorites from the list.

11. The HyperNewt Toolbar

The HyperNewt Toolbar offers convenient access to navigation and editing tools while you work with HyperNewt .

- 1 Open HyperNewt.
- 2 Tap the Information button  .
- 3 In the list that appears, tap Show Toolbar.



-  Styles—Opens the styles palette.
-  Go to top—Go to the first note.
-  Go to end—Go to the last note.
-  Previous—Go to the previous note.
-  Next—Go to the next note.
-  Scroll up—In the overview, scroll up one screenful. In the default view, scroll up by the number of pixels specified in the Display preferences.
-  Scroll down—In the overview, scroll down one screenful. In the default view, scroll down by the number of pixels specified in the Display preferences.
-  Overview—The overview button
- Newton/ Path name—Displays the directory path to the current directory. Tapping on the path name will open the Goto Directory slip.

- 4 To hide the toolbar, follow the above steps and choose Hide Toolbar.

12. The HyperNewt Button

You can have HyperNewt install a button that appears whenever HyperNewt is closed. Tapping on this button opens HyperNewt.

- 1 Open HyperNewt.
- 2 Tap the Information button  and in the list that appears, tap Prefs.
- 3 In the slip that appears, tap Display.
- 4 In the slip that appears, mark the checkbox Display HyperNewt button.
- 5 Tap Location to change the position of the HyperNewt button.

When you close HyperNewt, the HyperNewt button will appear in the position specified by the Location preference.



- 6 Tap on the button to open HyperNewt.
The HyperNewt button will disappear until the next time you close HyperNewt.

13. Replacing the Notepad

You can choose to replace the built-in Notepad application with HyperNewt. This provides convenience and enhanced compatibility with third-party applications that add additional features to the Notepad application, such as SilverWARE's MoreInfo and Jim Bailey's Timestamp.

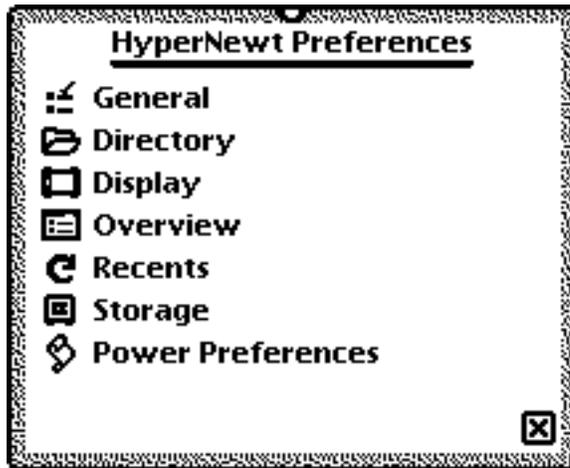
- 1 Open HyperNewt.
- 2 Tap the Information button  .
- 3 In the list that appears, tap Prefs. The HyperNewt Preferences slip appears.
- 4 Tap General.
- 5 In the slip that appears, mark the checkbox Replace Notepad app with HyperNewt.
- 6 Restart your Newton.

When your Newton has finished booting up, tapping on the Notepad application will bring up HyperNewt. Tapping on the HyperNewt application will bring up an alert telling the user to open the Notepad application.

Note: It is recommended that you install HyperNewt onto your internal store if you will be replacing the Notepad application. If HyperNewt is frozen or removed, you will have to restart your Newton to use the built-in Notepad application.

14. Setting Preferences

- 1 Open HyperNewt.
- 2 Tap the Information button .
- 3 In the list that appears, tap Prefs. The HyperNewt Preferences slip appears.



- 4 Tap the HyperNewt preference that you want to modify.

General

- Replace Notepad app with HyperNewt—Replace the built-in Notepad application with HyperNewt. See the chapter on replacing the Notepad for additional information.
- Display notes using Notepad app—Use the Notepad to view and create new information.
- Show other data types in New button—Allow the creation of new application data from the HyperNewt new button.
- Open header slip when creating new notes—Open the title header slip when creating new notes in HyperNewt.
- Stay open when opening HyperLinks—Keep the HyperNewt open when displaying HyperLink references.
- Delete linked data with HyperLinks—Try to delete the data referenced by a HyperLink when deleting an individual HyperLink.
- Import notes at startup (slower)—Import any notes not in HyperNewt's directory structure.

Directory

- Default sorter—Set the default sort for new directories.
- Rename directories when duplicating—Bring up the rename directory dialog box when duplicating a directory.

Display

- Left handed—Set whether the display should be tailored for left-handed users.
- Display HyperNewt button—Display a floating button that opens HyperNewt when the application is closed.
- HyperNewt button location—Set the location of the floating HyperNewt button.
- Display Goto Directory button—Display a button to open the Goto Directory dialog box.
- Display Notes Title button—Display a button that lists all items in the current directory.
- Display Check All button—Display a button that selects all items in the current directory.
- Toolbar scrolls by—Set the number of pixels to scroll the screen when the user taps on the scroll screen button in the HyperNewt toolbar.

Overview

- Open HyperLinks from overview—Display HyperLinked references by tapping on the HyperLink from the overview.
- Always open to overview—Always display the overview when changing directories.
- Overview font—Set the font used in the overview.
- Overview font size—Set the font size used in the overview.
- Overview font style—Set the font style used in the overview.
- HyperNewt font style—Set the font style used for displaying HyperLinks in the overview.

Recents

- Keep track of recently visited items—Remember recently opened directories, items, and HyperLinks.
- Show status bar button instead of tab—Display the recent button in the status bar instead of the directory tab.
- Recent Directories—Set the number of directories to keep track of.
- Recent Items—Set the number of items to keep track of.
- Recent HyperLinks—Set the number of HyperLinks to keep track of.

Storage

- Always store new notes internally—Store new information in the internal memory of the Newton device regardless of whether a storage card is inserted.
- Always store new directories internally—Store new directories in the internal memory of the Newton device regardless of whether a storage card is inserted.
- Always store new recents internally—Store new recents in the internal memory of the Newton device regardless of whether a storage card is inserted.

Power Preferences

- Display toolbar in directory tab—Display the HyperNewt toolbar in the directory tab.
- Display clock in directory tab—Display a clock in the directory tab instead of the HyperNewt title string.
- Hide directory tab—Hide the directory tab from the HyperNewt interface.
- Hide folder tab—Hide the folder tab from the HyperNewt interface.
- Hide keyboard button in status bar—Hide the keyboard button from the status bar in the default view.
- Hide recToggle in status bar—Hide the recognition button from the status bar in the default view.
- Abbreviate title, recent, goto buttons—Abbreviate the title, recent, and goto buttons in the status bar.

15. Keyboard Shortcuts

This chapter outlines the keyboard commands that HyperNewt supports. HyperNewt is designed to take advantage of a built-in keyboard or an external keyboard with your Newton device to make entering and editing data faster. The following commands are available when using HyperNewt with a keyboard.

HyperNewt

- Command-I—Information button  .
- Command-G—Goto Directory.
- Command-T—Recents.
- Command-Shift-D—Directory Folder Tab.
- Command-Shift-M—Directory button .

Overview

- Command-S—Show.
- Command-M—Move Directory button .
- Command-Option-S—Sort.
- Command-Shift-I—Directory Information .
- Command-Shift-R—Directory Routing button .
- Command-Tab—Toggle key view. Switches between the Directory Overview and the Stationery Overview.

Directory Overview and Directory slips

- Up arrow—Move up one directory.
- Down arrow—Move down one directory.
- Left arrow—Open parent directory.
- Right arrow—Open selected directory.

16. Frequently Asked Questions

This chapter describes common problems and suggests solutions. Note, that many of the procedures here can be found in more detail in the preceding chapters. If, after reviewing the suggested solutions in this chapter, you still cannot solve the problem, contact Foundation Systems at: support@tow.com

File management

My notes seemed to have disappeared. Where are they and how do I find them?

- The directory in which the notes appear may be on a storage card that you removed. If so, the notes seem like they have disappeared, though they are still on your Newton. Insert the card to see if the notes reappear.
- The directory in which the notes reside may have been deleted. Run the HyperNewt utility Find Lost Notes to locate these notes and move them to the root directory. See Appendix A for more information on the HyperNewt Utilities slip.
- You may have deleted a directory containing subdirectories which contained your notes. There is no way to retrieve these notes.

I've duplicated a directory containing directory aliases but the directory aliases are pointing to the original directory rather than the directory copy I've created. Why?

- Directory aliases are simply pointers to directories. When they are duplicated, the alias itself is not changed.

HyperLinks

I tap on a HyperLink, but an error message appears telling me that the data could not be found, but I know that the data hasn't been deleted.

- You may have moved the data to another store. If so, then the HyperLink will not be able to find the original item.

Removing HyperNewt

- 1 Open HyperNewt.
- 2 Tap the Information button .
- 3 In the list that appears, tap HyperNewt Utilities. The HyperNewt Utilities slip appears.

- 4 Tap Deinstall  and in the slip that appears, tap OK.

HyperNewt-specific information will be removed from your notes, and the HyperNewt soup indices will be removed from the Notepad soup.

- 5 Tap Extras.
- 6 Tap the folder icon, and in the list that appears, tap Storage.

- 7 Scrub out the following icons:  **HyperNewt**,  **HyperLink Manager**,  **HN Recents** and in the slip that appears, tap OK.

- 8 Scrub out the HyperLink Manager icon  **HyperLink Manager** and in the slip that appears, tap OK.

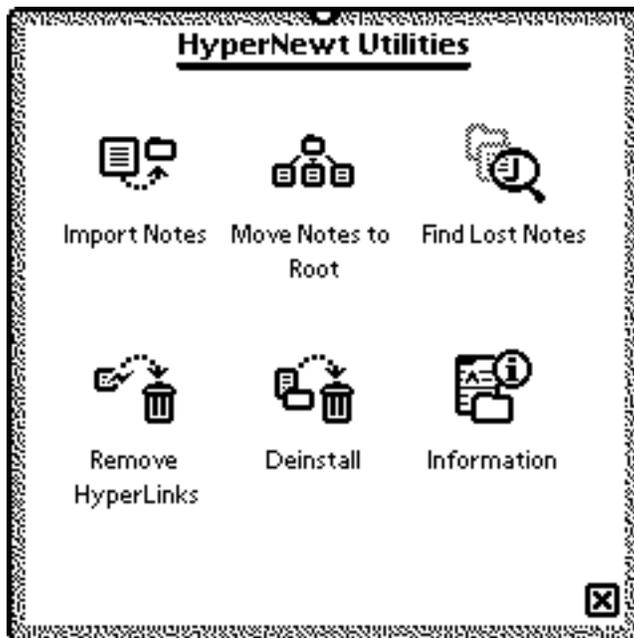
- 9 Scrub out the HyperNewt icon  **HyperNewt** and in the slip that appears, tap OK.

- 10 Restart your Newton device.

Appendix A: HyperNewt Utilities

The HyperNewt Utilities are a suite of utility functions for managing and viewing information in HyperNewt.

- 1 Open HyperNewt.
- 2 Tap the Information button  .
- 3 In the list that appears, tap HyperNewt Utilities. The HyperNewt Utilities slip appears.



- Import Notes—Finds any notes that are not in the HyperNewt directory structure and moves them to the root directory.
- Move Notes to Root—Moves all notes to the root directory.
- Find Lost Notes—Finds all notes whose parent directories cannot be found and moves them to the root directory.
- Remove HyperLinks—Deletes all HyperLink stationery items from the Notepad soup.
- Deinstall—Removes all HyperNewt information from the Notepad soup and prepares HyperNewt for removal from your Newton.
- Information—Calculates the number and size of directories and items in HyperNewt.

Appendix B: HyperLink Manager

This section outlines the HyperLink Manager application. You use the HLM application to install the default HyperLink Managers, view information on an HLM, and to delete HLM's.

- 1 Open HyperNewt.
- 2 Tap the Information button  and in the list that appears, tap HyperLink Manager. If installed on your Newton, the HyperLink Manager application will open.



Installing default HyperLink Managers

- 1 Tap the Information button .
- 2 In the list that appears, tap Install Default HLMs.
- 3 An alert will appear, confirming your choice. Tap OK.

Deleting HyperLink Managers

- 1 Tap the checkbox next to each HLM you want to delete. A checkmark appears in the checkbox of the selected HLM's.
- 2 Tap the Routing button  and in the list that appears, tap Delete.
- 3 An alert will appear, confirming your choice. Tap OK.

Appendix C: HyperLink API

This section is for developers who are interested in creating HyperLink Managers for their own data. Any application that supports NOS 2.x routing can use HyperLinks. A developer needs to create a HyperLink Manager (HLM) that handles the saving, display, and deletion (optional) of HyperLinked data.

There are three types of HyperLink Managers, differentiated only by the type of data that they support:

1. Soup-based HLM's: Data being HyperLinked are identified by the soup in which they belong.
2. Class-based HLM's: Data being HyperLinked are identified by their class.
3. App-based HLM's: Data being HyperLinked are identified by the application in which they are created.

Among the default HLM's, the following are (1) HLM's:

Calls, Cigar Box, Gulliver, Home Inventory, MORGAN, Names, NewtWorks, Notes, Out of Pocket

Among the default HLM's, the following are (2) HLM's:

Dates, Extras Drawer, QuickFigure Pro

Among the default HLM's, the following are (3) HLM's:

Copperfield, In/Out Box

HyperLink Manager Soup Format

HyperLink Managers are stored in the HyperLink Manager Soup. The HLM Soup is called "HyperLink Manager". In this soup each entry has the following slots:

Slot descriptions

soupname	A string that is the name of the soup in which the data being HyperLinked belongs.
appsymbol	A symbol. Specifies the class or appsymbol for the data being HyperLinked.
SaveHyperLink	A function to save the data.
ShowHyperLink	A function to display the HyperLinked data.
DeleteHyperLink	A function to delete the HyperLinked data.
version	An integer or real number that is the version number of the HLM.
author	A string or rich string that is the name of the HLM's author.
creationDate	An integer; the date the HLM was created specified in the number of minutes passed since midnight, January 1, 1904.

HyperLink Manager Soup Indices

This section lists the soup indices used by the HyperLink Manager soup.

```
{ structure: 'slot', path: 'appsymbol', type: 'symbol' },  
{ structure: 'slot', path: 'soupname', type: 'string' },
```

IMPORTANT: HN/Notepad Compatibility

Because the user can choose to replace the built-in Notepad application with HyperNewt, you have to make sure that any calls to HyperNewt are being sent to the correct application. Define the following function in your Project Data:

```
DefConst('kGetCorrectAppFunc, func() begin
    local app := GetRoot().(|HyperNewt:ATOW|);

    if app:PrefsLookup('replaceNotepad) then GetRoot().paperroll;
    else GetRoot().(|HyperNewt:ATOW|);
end);
```

Calling `kGetCorrectAppFunc` will return a reference to the application that is set up to receive messages.

HyperNewt public methods

DefaultShowHyperLink

`HyperNewt:DefaultShowHyperLink(entry, appsymbol)`

Takes a soup entry to display and the appsymbol of the application to display it.

entry The soup entry that will be displayed.

appsymbol A symbol that is the appsymbol of the application that will display entry.

Required HLM methods

The following section describes the functions needed to create a HyperLink Manager for your data.

SaveHyperLink

`HLM:SaveHyperLink(entry)`

Takes the data to be HyperLinked and returns a frame containing a HyperLink information frame, title, and icon to HyperNewt..

entry The data to be HyperLinked.

`SaveHyperLink` must return `nil` or a frame containing the following slots:

Slot descriptions

title A string that will be displayed in the HyperNewt overview.

icon An icon that will be displayed in the HyperNewt overview.

hyperlinkinfo A frame with the following slots:

Slot descriptions

soupname A string that is the name of the soup in which the data being HyperLinked belongs. Required for Type (1) HLM's.

appsymbol A symbol. Specifies the class or appsymbol for the data being HyperLinked. Required for Type (2) and (3) HLM's.

timestamp An integer; the date the data was created specified in the number of minutes passed since midnight, January 1, 1904 (Optional).

<code>shortTitle</code>	A string that is the title to be displayed in the overview if the Short Titles preference is selected (Optional).
<code>[...]</code>	Any additional slots that the HLM needs to maintain.

Many developers may want to store an `EntryAlias` for soup entries in their `HyperLink` information frame. Remember that if the data is moved to another store, the data may be impossible to locate by the `HyperLink Manager`.

ShowHyperLink

`HLM:ShowHyperLink(hyperlinkinfoframe)`

Takes a `HyperLink` information frame and displays the linked data to the user, if found. `ShowHyperLink` should return `true` if the data was displayed, `nil` otherwise.

`hyperlinkinfoframe` The `hyperlinkinfo` frame in the frame that `SaveHyperLink` returns.

If your application saves data to soups, you may want to try calling `HyperNewt`'s default method for displaying a `HyperLinked` soup entry. Call the root method, `DefaultShowHyperLink`.

DeleteHyperLink

`HyperNewt>DeleteHyperLink(hyperlinkinfo)`

Takes a `HyperLink` information frame and deletes the linked data, if found. `DeleteHyperLink` should return `true` if the data was deleted, `nil` otherwise.

`hyperlinkinfoframe` The `hyperlinkinfo` frame in the frame that `SaveHyperLink` returns.

Sample HyperLink Manager

The following code snippet details a sample HLM for the Notepad application. Any note that is HyperLinked will use the following HLM for saving, displaying, and deleting.

```
DefConst('kPaperRollSaveHyperLinkFunc, func(entry) begin
    local entryDataDef := GetEntryDataDef(entry);
    local hyperlinkinfo := {};
    local title, icon;

    if entryDataDef then begin
        title := entryDataDef:StringExtract(entry, 1);
        icon := entryDataDef.icon;
    end;

    hyperlinkinfo.shortTitle := entry.title;
    hyperlinkinfo._alias := MakeEntryAlias(entry);
    hyperlinkinfo.class := ClassOf(entry);

    // Required slots

    hyperlinkinfo.soupName := ROM_paperRollSoupName;
    hyperlinkinfo.timestamp := entry.timestamp;

    return { title: title, icon: icon, hyperlinkinfo: hyperlinkinfo };
end);

DefConst('kPaperRollShowHyperLinkFunc, func(hyperlinkInfo) begin
    local entry := EntryFromObj(hyperlinkinfo);
    local a := call kGetCorrectAppFunc with ();

    if entry and a then begin
        if a:PrefsLookup('displayWithNotepad) then
            call a.DefaultShowHyperLink with (entry, 'paperroll);
        else call a.DefaultShowHyperLink with (entry, '|HyperNewt:ATOW|);
    end;
    else nil;
end);

DefConst('kPaperRollDeleteHyperLinkFunc, func(hyperlinkInfo) begin
    local entry := EntryFromObj(hyperlinkinfo);

    if entry then begin
        EntryRemoveFromSoupXmit(kAppSymbol);
        true;
    end;
    else nil;
end);

DefConst('kPaperRollHLM, {
    soupname: ROM_paperRollSoupName,
    SaveHyperLink: kPaperRollSaveHyperLinkFunc,
    ShowHyperLink: kPaperRollShowHyperLinkFunc,
    DeleteHyperLink: kPaperRollDeleteHyperLinkFunc,
    author: "Adam Tow",
    creationDate: 49496801, // Sunday, February 8, 1998
    version: 1.0,
});
```

Appendix D: Soup Structures

This section describes the various soup structures and formats used by the HyperNewt application.

HyperNewt / Notepad Soup Format

This section describes the format of entries in the Notepad Soup that are visible to HyperNewt. The Notepad Soup is called “Notes”. In this soup each entry has the following additional slots:

Slot descriptions

'|HyperNewt:ATOW| The HyperNewt information frame with the following slots:

Slot descriptions

parentID	A symbol. Specifies the HyperNewt directory that the entry is in.
links	An array. Reserved for internal use.

HyperNewt / Notepad Soup Indices

This section lists the soup indices added to the Notepad soup by HyperNewt.

```
{  structure: 'multislot,  
  path: [[ pathExpr: '|HyperNewt:ATOW|', 'parentID ], 'timeStamp ],  
  type: ['symbol', 'int ], },  
  
{  structure: 'multiSlot,  
  path: [[ pathExpr: '|HyperNewt:ATOW|', 'parentID ], 'title ],  
  type: ['symbol', 'string ], },  
  
{  structure: 'multiSlot,  
  path: [[ pathExpr: '|HyperNewt:ATOW|', 'parentID ], 'class ],  
  type: ['symbol', 'symbol ], },
```

HyperNewt Directory Soup Format

This section describes the format of entries in the HyperNewt Directory Soup. This soup contains all the HyperNewt directory items. The HyperNewt Directory Soup is called “Hyper Newt Indexes”. In this soup each entry has the following slots:

Slot descriptions

class	Always the symbol ' Directory:HyperNewt:ATOW
parentID	A symbol. Specifies the HyperNewt directory that the directory is in.
directoryID	A symbol. Specifies the symbol identifying the directory.
sorter	A symbol. Specifies the type of sort for the directory: 'timestamp', 'title', or 'class'.
title	A string or rich string that is the title of the directory.
timestamp	An integer; the date the directory was created specified in the number of minutes passed since midnight, January 1, 1904.

HyperNewt Directory Soup Indices

This section lists the soup indices used by the HyperNewt Directory Soup.

```
{   structure: 'slot,  
    path: 'directoryID,  
    type: 'symbol },  
  
{   structure: 'multiSlot,  
    path: ['parentID, 'title],  
    type: ['symbol, 'string] },
```

HyperNewt Recents Soup Format

This section describes the format of entries in the HyperNewt Recents Soup. This soup contains all the HyperNewt recent and favorite items. The HyperNewt Recents Soup is called “HyperNewt Recents”. In this soup each entry has the following slots:

Slot descriptions

<code>class</code>	A symbol. Specifies what kind of recent or favorite item: ' Directory:HyperNewt:ATOW ', 'stationery, or ' HyperLink:HyperNewt:ATOW '.
<code>alias</code>	An entry alias to an entry in the Notepad or HyperNewt Directory soup.
<code>favorite</code>	A boolean. Specifies whether or not the item is a favorite.

HyperNewt Recents Soup Index

This section lists the soup index used by the HyperNewt Recents Soup.

```
{   structure: 'slot,  
    path: 'class,  
    type: 'symbol },
```

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